

PREVENTION \* LAW ENFORCEMENT \* RESEARCH

## Maine Fire Marshal News

Maine State Fire Marshal's Office • Fire Research Maine Department of Public Safety Fire Marshal's Web Page November 2009

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### **WELCOME!**

Welcome to another issue of the Maine Fire Marshal News. Please take some time to read the newsletter and send us your own article for a future publication or comments in general. As always, we do appreciate the feedback on the newsletter many of you have sent over the past few years and look forward to hearing from you more in the future.



### A MESSAGE FROM THE FIRE MARSHAL

Over the past few months we've received many calls from Maine citizens regarding the new smoke detector and carbon monoxide law. All callers have had many good and very

reasonable questions.

We have also welcomed the concern so many have had with being compliant with the law and found that the vast majority think the law was a good idea despite any difficulty they

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may have had understanding precisely how it applies to their particular situation. This positive attitude expressed by so many is very welcome and we appreciate hearing people express their own opinion that this is an important issue.

Because new laws can and do create an unanticipated increase in work, which tends to crowd out other planned activities, it is difficult. On the other hand, in answering hundreds of calls from property management companies, realtors, apartment owners, electricians and many others we've come to realize and appreciate the public education opportunity this law has provided us.

During the last legislative session the Fire Marshal's Office sought to join many other Fire Marshal's around the country by creating a position for a Fire and Life Safety Educator to focus specifically on fire prevention and safety education and awareness. Because the position provides the Fire Marshal's Office with the well recognized tool of public education to compliment engineering and law enforcement efforts, the position was approved unanimously by the Committee on Criminal Justice and Public Safety. Unfortunately, the economy continued its downturn and the position was removed later in the legislative process.

The smoke detector and carbon monoxide law doesn't address <u>all</u> the territory a full-time Fire and Life Safety Educator would cover, nor employ all the methods such an individual would use to effectively reach all Maine citizens with

fire prevention and safety messages. However, in leading so many individuals to call our office, it has given us an opportunity to talk about these mitigation systems in general and to help people understand why they are a critical life safety component in residential occupancies.

In addition to many phone calls (so many in fact we had to designate one person to focus on them) members of our staff have gone out to speak to gatherings of realtors, electricians, apartment owners, and other groups. These more proximate engagements have given us the opportunity to learn more about the regulated parties and address the unique concerns many of them have. We have also posted items on our web page referencing the new law.

In retrospect, the law has assisted the Fire Marshal's Office in partially meeting it's obligation to develop a "plan for substantial compliance" by raising a number of questions which in turn resulted in the calls to our office and invitations to speak at gatherings. Again, we now see this as a great opportunity and could only hope people would continue to inquire about these important residential fire and carbon monoxide detectors long after questions about this law in particular subside.

Questions about these mitigation systems are particularly critical at this time of the year. It is time to turn our clocks back and cold weather is already arriving. In closing let me give you some tips about fire and carbon monoxide prevention and safety.

- > Be sure to clean out and check your chimneys (there are over 500 chimney fires in Maine every year!).
- > Have your furnace inspected so that it is burning efficiently and not emitting CO into your home.
- Needless to say, change the batteries in all CO and smoke detectors and make sure they will operate properly should you need them.

- ➤ Know what you would do if a fire occurs in your home (1,700 do every year in single and multi-family dwellings)
- ➤ Be extremely careful not to place any combustible material within 3 feet of any portable electric heater, wood stove or pellet stove.
- Make sure all portable electric heaters, wood stoves and pellet stoves are clean, maintained appropriately and operating properly (heating related fires comprise the largest percentage of home fires by cause).
- Remember to always use caution when disposing of your pellet and wood stove ashes. (we see far too many fires started due to careless disposal!)
- ➤ As the holidays arrive, remember to maintain and use all related decorations including Christmas trees, lighting, and in particular, candles carefully.

On that optimistic note let me wish you a warm and safe fall and early winter season along with a memorable Thanksgiving and other seasonal holidays.

Sincerely,

John C. Dean Fire Marshal

For more information on the new Maine carbon monoxide and smoke detector law don't hesitate to contact our office at 626-3873. We'd be happy to help you help us.



www.homefiresprinkler.org

## STUDY: U.S. BEHIND WORLD IN FIRE PREVENTION

BY ED BALLAM Firehouse.com News

Fire officials in the State of Guanajuato in Mexico have a belief that the best fire department isn't the one that responds to the most calls. Rather, it's the one that prevents the most fire.

A new "best practices" report shows virtually the entire world does a far better job at reducing fire causalities than the United States by as much as 50 percent in some cases.

The final installment of a three-year study examining how 10 nations handle fire prevention in their countries was recently released. The report, commissioned by the U.S. Centers for Disease Control and Prevention (CDC), was researched and written by System Planning Corporation's TriData Division in Arlington, Va. The principal researcher was TriData's president Philip Schaenman.

"It's not that other nations are doing anything that we haven't tried, it's just that the scale in which they do it is just spectacular compared to what we do here in the United States," said Schaenman, who in the late 1970s and early 1980s, served as the U.S. Fire Administrator in charge of the National Fire Data Center.

"Unfortunately, our fire service has not been excited about prevention."

But that, Schaenman says, has to change if the U.S. is serious about its commitment to reduce fire fatalities. Other developed nations have figured it out and devote extraordinary resources to home inspections, fire prevention instructions to all populations, and requiring line firefighters to take on the role of fire prevention as part of their daily duties.

The report, totaling more than 300 pages, was rolled out in three parts since 2007. Part I looks at best practices in Europe (England, Scotland, Sweden and Norway). Part II examines

innovations in the Asia/Pacific region (Australia, New Zealand and Japan). And the third and final part studied North America (Canada, Mexico, the Dominican Republic and Puerto Rico). The complete study is available for download at System Planning Corporation's Web site.

Since the report has been available, it's been downloaded 12,000 times, according to James M. Kudla, System Planning Corporation vice president of communications.

One of the most exciting things about the report, according to Schaenman, is that the best practices identified could help reduce fire deaths and injuries in the U.S. at little or no additional cost. Education and one-on-one instruction by firefighters is a top factor in reducing fire deaths, he said.

By way of example in England, British firefighters went on strike in 2003 demanding a 40 percent pay increase, Schaenman said. During the strike, ironically, the number of fires and fire deaths dramatically reduced, he said, because people were extremely careful.

"It proved that fire education worked," Schaenman said. "It proved the wrong thing for them, but it was very interesting."

For the British negotiating with the firefighters, it gave them the opportunity to push the rank and file into fire prevention. Schaenman said the firefighters were offered a 17 percent raise with the understanding the rank and file were going to have to do more "white collar" fire prevention work. "Fire prevention became part of their job," he said.

Schaenman said firefighters in the U.S. should start embracing fire prevention as a key part of their jobs and not try to shift the responsibilities or, worse avoid them. He recalls the fire service's resistance to providing emergency medical services 20 to 30 years ago and the number of firefighter jobs that were lost as a result.

U.S. Behind World in Fire Prevention cont'd from page 3

"We're going to have to reduce some of the work load we expect of firefighters and increase other duties," he said. "There are a lot of best practices that are doable here and doable without any increase in cost."

Some firefighters in Canada are required to do fire prevention field work two hours of every day, doing home inspections with the goal of visiting every home in their district every five years. Initially, those firefighters balked at the requirement, but soon realized the importance of the work and began to enjoy it, he said.

Another big trend Schaenman discovered was developed nations partnering with social service agencies, such as Meals on Wheels and similar organizations that have people in homes of high risk populations, like the elderly.

"They're in touch with the real shut-ins, the high risk populations," he said. Those agencies report to the fire departments hazards and unsafe conditions for fire department intervention before fatal fires occur.

The report reveals that kids in Mexico learn about fire prevention with the help of music, and "The Rapping Firefighter" helps teach students.

"It turns out students in Mexico learn their lessons better with a dose of Salsa," Schaenman said.

There are some technological best practices out there too that help prevent fire deaths, he said.

In Scandinavia, the wicks in candles don't go all the way to the bottom, which essentially makes for self-extinguishing candles that burn out before they completely liquefy and cause fires, he said.

Unattended food burning on a stove is another leading cause of fatal fires and, Schaenman said there are devices in Europe that require the user to set a timer for 10 to 15 minutes before using

the stove. The electric cooking appliance automatically turns off when the timer runs out, requiring it to be rest for additional cooking.

For the very high risk elderly and shut-ins who may have physical disabilities that make it difficult to evacuate in the event of fires, Europeans have portable temporary sprinkler systems that can be installed in the person's home for \$2,000 to \$3,000. When the person dies of natural causes, or moves, the system can be installed in another person's home for protection, he said.

In Vancouver, British Columbia, there are laws that all new residences must have sprinklers and any building that's 50 percent or more remodeled must also be fitted with sprinklers. The result is that more than half of the homes in the district now have sprinklers in the 19 years since the law was adopted.

"That is just spectacular," Schaenman said, noting that it took 10 years to pass the legislation.

Other highlights from the report include information about mobile home safety fire vans used in Australia and New Zealand that have compartments simulating rooms in a home to show fire safety issues in each area.

Ontario, Canada has a Zero Tolerance philosophy toward property owners and tenants who do not install and maintain smoke alarms on each story. Non-compliance can result in citations, like traffic tickets, with fines up to \$235.

In Mexico, fire and life safety messages with bright colors and pictures are printed on milk cartons for kids to easily receive the attractive message. And candles, which are widely used on home altars and left burning for long periods of time, have been converted to battery-powered candles with fire officials' promoting their use.

In Japan, education is the key component to fire safety, and the report concludes that the Japanese have perhaps the most extensive fire U.S. Behind World in Fire Prevention cont'd from page 4

safety education program among developed nations.

And Schaenman is convinced that education, provided by the rank and file firefighters, is the most effective tool the U.S. has to reduce fire causalities in the nation. He has been working with the International Association of Fire Fighters (IAFF) promoting the report.

"They are very interested in it which is very encouraging," he said. "They recognize its importance."

There are literally hundreds of ideas in the report -- some are familiar in the U.S. and others are brand new, but the volume and emphasis found in other developed nation is overwhelming by comparison. And the reduction in fire causalities is a reflection of the effort.

"Much of what we found can be adapted to the United States," Schaenman said. "It may take changing the fire service culture a little bit in some places to incorporate the new practices, as it has in other nations, but some of these practices are already in use here, though not on the scale as in cities abroad."

Schaenman, who has been studying and researching the fire service for more than three decades, is convinced that real progress in fire safety can be made in the United States by implementing the best practices found around the world.

"We can save many lives in the United States over the next five years if we adopt the best practices proven in other nations," he said. "We would recommend that major fire organizations consider promoting the implementation of best practices because they can save citizens' lives and help reduce fire service casualties."



### The State of Maine's Fire Service

A series Presented by Maine Fire Chiefs

With that global perspective in mind let's hear about Maine's Fire Service from Chief Jim Dittmeier of Searsport, Maine. Chief Dittmeier agreed to submit this article which part of a series of articles Maine Chief's have provided us with to talk about issues they believe are important to Maine's Fire Service. Please take a moment to read what the Chief has to say and don't hesitate to contact me if you'd like to provide your own perspective. Do you agree with Chief Dittmeier? Or are you seeing the fire service in a different light?

### Chief Dittmeier responded to the following question:

In terms of suppression, public education, public awareness, intervention, code enforcement activities, and EMS services where do you think the fire service should be now and where do you think it should be in the future? Why do you believe this and what obstacles do we face?

When Richard asked me to write and answer his questions, I decided to take a different viewpoint and compare my previous term as Chief on Long Island, NY to Maine. I hope no one is offended but, it was a shock when I joined up here, especially the budgets to run a department.

In terms of suppression, Maine Firefighters are as well or better trained then anyplace else. Equipment is a different story. Money was not usually a problem on Long Island and my budget for a town of 15,000 with approx 400 alarms a year was higher then all of Waldo County Fire Departments together, and it was a volunteer department. Maine Firefighters fight the same type fires as everywhere else and take the same risks as everywhere else, but we do it with less and therefore put ourselves in more danger. Equipment alone doesn't make a better firefighter but it does make the job easier. Most extra curriculum activities I call them, like hazmat, confined space, water rescue were handled by county special units where in Maine

the locals handle most everything. Manpower seems to be a problem no matter where you go, but I have been lucky enough to add a few to my roster in the last 2 years. If you have a bigger pool to pull from, it might seem like you don't have a problem, but it still adds up to about 1% of the town will come and do what we do. Most towns have started paying something for alarms and with the way things are now, more should consider doing something. The year I left NY, my county started giving 10% across the board tax breaks to volunteers and most had the LOSAP program also. If the towns figured out what a paid department would cost with benefits, they would know what a bargain we supply to the community.

As far as public education, it boils down to money again. If you had a large enough budget to have a fire prevention program and buy a fire prevention trailer and do programs then you will usually have better results. That is one place Maine is behind. I know in my department I do the best I can with limited resources, but we need to do more and schools need to be more receptive to fire prevention programs. We have to be more proactive in our approach to fire prevention. I have the time luckily to inspect buildings in my town and preplan. I feel every time I find a violation and get it fixed, I prevented a possible fire.

Code enforcement is no different. I'm sure the State Fire Marshal would love to have 20 more inspectors to enforce fire codes because enforcement saves lives and property. We have more houses burn to the ground then most places because, either the house was old balloon construction or it was made and maintained poorly. I can tell you balloon construction wasn't invented by anybody in the fire service. With strict codes come fires that are mostly confined to 1 or 2 rooms whereas here it's fully involved within a few minutes. If you think about it, Maine has just passed a law to have smoke and CO detectors in new and resale homes. Most states have done these years ago and have gone even farther trying to prevent fire deaths.

Chief's need to get more involved with their selectmen or town leaders. We can't assume that they know what we do and all the regulations that are handed down to us unless we tell them. Don't stop there, go higher to your legislature and then to your voice in Washington. Some Mainers have an attitude (it won't happen here) or (That's not the way we did it for the last 50 vears) and we have to change that to reflect the possibilities that exist in the world we live in. In the end, Long Island has better equipment, more manpower and better fire codes, but I won't trade any of it for the firefighters here or the local people that are so easy to work with. My hope is that Maine's economy will someday get to the point that we can have the best equipment because we are risking just as much as anyone else and with much less.

# THE OVERLOOKED HOME IMPROVEMENT-FIRE SPRINKLERS

By Todd Bonner

The most overlooked home improvement project is the installation of a life-saving fire sprinkler system. The United States government is moving to take steps to make fire suppression systems in new apartment and town homes mandatory. Every home owner should take steps now to upgrade their home with a fire protection system.

During large scale home improvement projects often the most critical and overlooked addition to a home, condominium or town home is the installation of fire sprinklers.

Each year fires are the cause of more deaths in the United States than the combination of all other natural disasters. Even with the increase in natural calamities over the past few years, home fires remain a more personal and imminent threat. These fires quit often strike at the most inopportune moments and quickly build into an unstoppable inferno.

The first line of defense in most homes is the smoke alarm. Unfortunately too many home

owners do not take the time to periodically check the operational state of their smoke detectors. In addition, many smoke detectors are misplaced; either on a wall or near a constant source of fresh air from an air duct thereby negating their effectiveness at detecting smoke. Smoke detectors cannot and should not be your only line of defense against this silent killer. Thanks to upcoming legislation, many new condominium and town-homes will be required by law to include a fire protection system in the form of automatic fire sprinklers, giving the new home owners a new and infinitely more effective line of defense for safeguarding their families and possessions. While this upcoming law will only apply to newly constructed homes, current home owners are encouraged install their own fire sprinkler system. In homes with a fire sprinkler system installed, the chances of death from a home fire lowered by over 50%. A fire needs heat, fuel and an air source for it to burn. Fire sprinklers take away the heat from this mix thereby extinguishing the fire.

Contrary to popular belief these systems are relatively inexpensive, especially when compared to other factors such as the potential damages and property loss from a house fire and discounts on Fire insurance premiums. Fire Sprinklers not only save the homeowner's money, but the community as well, reducing the burden on the already overtaxed fire departments and emergency response personnel.

Another myth is that fire sprinklers will cause extreme water damage to personal property. On the contrary, in the event of a house fire the firefighters will use nearly 10x as much water to control a fire as would have been required by a simple fire sprinkler system. Currently just over 5% of residential homes have a fire sprinkler system installed, a figure that is disturbingly low. As the government becomes more aware of the dangers of living without a fire suppression system and takes steps to protect us, hopefully each homeowner will heed their advice to protect their own homes and families from fire related accidents.

Next time you consider a remodeling project, don't forget to increase your family's fire defenses and piece of mind by installing a fire sprinkler protection system of your own.



åsk your bone builder to install fire sprinklers and prefer what you value most. And visit the U. S. Fire Administration's Web site at www.usfa.fema.gov to learn more about home fire sprinklers.

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### MEFIRS – Maine Fire Incident Reporting System

	Current Statistics 2009*	Final Statistics for 2008
Total Incidents Reported:	27,909	71,667
Fires:	1,512	3,531**
EMS:	17,826	43,086
All others:	8,571	23,815
Fire Departments Reporting	125	181
Total Fire Dollar Loss	\$22,097,457	\$31,163,227
Civilian Fire Related Injuries	14	42
Fire Service Fire Related Injuries	16	22
Civilian Fire Related Deaths	9	14
Fire Service Fire Related Deaths	0	1

<sup>\*</sup> The Fire Marshal's Office will have all data for 2009 in by June-July of 2010.

**QUESTION 1:** If a fire department was dispatched on a call, but canceled prior to going en route (did not move an inch!), should the call be reported in NFIRS?

**ANSWER 1:** There was an alarm and the fire department was preparing to respond. Personnel and possible apparatus were actively engaged. The incident should be reported using incident type code 611 - Canceled en route. The alarm time is the time the fire department was alerted and the clear time is the time the call was canceled. There is no arrival time to report and the action taken would be code 93 (canceled en route)

QUESTION 2: Is there an outline or list of incidents/activities that should be reported to NFIRS?

**ANSWER 2:** NFIRS is the local, state, and national fire reporting system. NFIRS is all incident reporting. To show and tell the full value of the fire service, all alarms or public service calls should be documented in NFIRS. The incidents have full value to all once they are complete and in the national database.

**QUESTION 3:** A fire department had a grass fire that spread and started a building on fire. Would the grass fire be the original incident with the building as an exposure?

**ANSWER 3:** Yes, the grass fire would be the primary incident with exposure number 000 and the house fire would be exposure 001. For the grass fire, complete both the Basic Module and the Fire Module or complete the Basic Module and the Wildland Fire Module. For the building fire, complete the Basic Module, Fire Module, and the Structure Module.

**QUESTION 4:** Why is this incident invalid? The error message was "a confined fire incident may not have a total loss exceeding \$5,000. The fire was in a building where trash is compacted before hauled to the landfill. Incident Type was 118 (Trash or rubbish fire in a structure). Only the trash burned; however, there was so much heat generated that the building and wiring in the building were severely damaged. However, there was no flame impingement to the building. The dollar loss was \$260,000. The damage was such that a structural engineer is being called in to make sure the building is sound.

**ANSWER 4:** Because the property loss is greater than \$5,000, the incident type cannot be a confined fire (code 113-118). Due to the amount of loss, this is coded as a structure fire: Incident Type 111, and the Fire Module and Structure Fire Modules are completed. If the trash in the building, which was probably in the range of hundreds of cubic tons in size, was burning and producing so much heat that the building is now structurally not safe, consider the trash and the compactors as contents and the fire as a structure fire.

"Fight Fire with Facts"

<sup>\*\*</sup> Represents single incidents only.

### **MAINE FIREWATCH**

By Richard E. Taylor, Sr. Research and Planning Analyst

The following fires occurred in Maine since this newsletter was last published in July. The burnt out dryer you see Chief Willis of the Hermon Fire Department examining is part of an interesting story. The dryer caught fire around 2:00 AM but thanks to operating smoke



detectors a mother was able to grab a 22 month-old girl, pet cat and dog before escaping to call the fire department. Chief Willis used this as a media

opportunity to educate the public on how important operating smoke detectors are.



Photo by Dawn Gagnon, BDN

The massive fire above occurred in Topsham at a Grimmel Industries metal recycling facility. The fire smoldered on for over 30 hours requiring local firefighters to continue dousing one crushed vehicle after another until all smoke and potential fire was stopped. Talk about expensive response costs! The dark plume of smoke from the fire could be seen from miles around. The fire was so hot and destructive the exact cause of the fire was never pinpointed by Maine State Fire Marshal's Office investigators.

The Elm Tree Diner in Houlton was gutted by fire this past September. The diner was considered by residents to be a landmark.



Photo by Gloria Doody Powers of Houlton, ME

The Elm Tree Diner had been in operation for over 34 years in Houlton. The cause of the fire was determined to be accidental and started in the kitchen area due to an electrical malfunction. The business had recently been renovated and town officials as well as residents all hope the restaurant will be rebuilt and reopened.

The picture below shows a barn being totally destroyed by a fire that started around



2 AM. The barn located in Robbinston housed horses and chickens. Fortunately, none of the horses were in the barn. Unfortunately, many chickens were. Firefighters from Robbinston, Perry, and Red Beach responded to the fire the cause of which has not been determined.



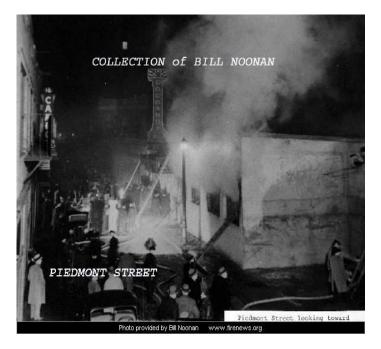
http://www.smokefreeforme.org/

#### This Month in Fire History

Cocoanut Grove night club fire kills 492, Boston (MA), 1942

Perhaps the most well known of catastrophic fires in American history was the Cocoanut Grove Night Club fire of November 28, 1942. This fire took the lives of 492 individuals and injured another 166. A memorial plaque is now imbedded in the sidewalk at the location of the night club. It reads:

"In memory of the more than 490 people who died as a result of the Cocoanut Grove fire on November 28 1942. As a result of this terrible tragedy major changes were made in the fire codes and improvements in the treatment of burn victims not only in Boston but across the nation."



National Fire Protection Association is founded, Boston (MA), 1896

Great Boston Fire, loss worth \$1,146 million (2003 dollars), Boston (MA), 1872

Stratford Apartments home hotel fire kills 25, Los Angeles (CA), 1973

MGM Grand Hotel fire kills 85, Las Vegas (NV), 1980 Phillips Dance Hall & Martin's Grocery, fire kills 25, Ville Platte (LA), 1919

Golden Age nursing home fire kills 63, Fitchville (OH), 1963





## UPCOMING EVENTS & ANNOUNCEMENTS

If you have an announcement or upcoming event you'd like to post in this newsletter please feel free to forward it to using the contact information below. The next issue will be in February 2010.



The *Maine Fire Marshal News* is an electronic publication of the Maine State Fire Marshal's Office.

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To submit articles for publication contact the Fire Marshal's Office at (207) 626-3870 and ask to speak with the editors. You may also e-mail an article or comment to Richard.e.taylor@maine.gov

All articles are subject to an editorial staff review prior to inclusion. For a copy of submission requirements contact the editorial staff.

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